

## SOME UNDESCRIPTED SPECIES FROM MEXICO AND GUATEMALA

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### **Prunus Skutchii, sp. nov.**

Arbor usque 36 m. alta, trunco columnari basim versus ca. 15 dm. crasso cortice rugoso brunneo obtecto; ramulis maturis fuscis lenticellis tumidulis verrucosis, hornotinis laevibus; foliis glaberrimis vel rariter juventate in costa sparsissime inconspicuissimeque strigillossis; lamina subcoriacea oblonga vel elliptico-oblonga 12–15 cm. longa 6–9 cm. lata medium versus vel infra medium latiore, margine integerrima, basi suboblique rotunda vel obtusa, apice (saepe destructo) acuta vel breviter attenuata, subtus costa et nervis primariis arcuatis (nervis secondariis vix vel paulum conspicuis), ima basi ad latus utrumque costae glandulo elliptico 1–1.5 mm. longo instructa, supra viridiore laeviore; petiolo 15–20 mm. longo supra sulcato ca. 2 mm. crasso; racemis e nodis defoliatis erumpentibus solitariis; rhachi 5–9 cm. longa usque ad basim florifera sparse puberulente medium versus ca. 1 mm. crassa angulata; pedicellis gracillimis rectis 8–12 mm. longis puberulentis; hypanthio 4–4.5 mm. alto 5–6 mm. diametro crateriformi extus puberulente intus infra medium pilis 0.2–0.6 mm. longis villoso; lobis calycis subdeltoideis ca. 1.5 mm. longis; petalis albis ca. 10 late ovatis ca. 3 mm. longis latisque margine plus minusve dentatis facie superiore basim versus villulosis; staminibus ca. 30; filamentis glaberrimis 2–3 mm. longis; antheris oblongis 1.5 mm. longis; pistillo 5 mm. longo; ovario pilis sparsis adpressis villoso; stylo ca. 0.8 mm. crasso ca. 2.5 mm. longo; stigmate obliquo depresso ca. 1.5 mm. diametro; fructu ignoto.

GUATEMALA: Finca Moca, dept. Suchitepequez, 1140 m. alt., tree 36 m. tall in forest on ridge, trunk columnar and 15 dm. thick at breast height, covered with a rough dark brown bark, Jan. 8, 1935, A. F. Skutch 2077 (TYPE, Arn. Arb.).

A species belonging to the subsection MESOCRASPEDON of Koehne, Bot. Jahrb. **52**: 307 (1915), and related to *P. Cortapico* Koehne of west-central Mexico. From this species it differs in its essentially glabrous herbage, broader leaves, long pedicels, more open hypanthium, villous ovary, etc. A collection from near Mirador, Vera Cruz (*Purpus* 8426)

is very similar to the plant described and is probably referable to the proposed species.

**Prunus guatemalensis**, sp. nov.

Arbor 18 m. alta, trunco ca. 40 cm. crasso; ramulis maturis cinereis lenticellis vix conspicuis transverse elongatis ornatis, hornotinis laevibus sparsissime inconspicueque puberulentis; foliis supra glaberrimis subtus pilis subfulvis 0.3–1 mm. longis villulosis; lamina coriacea rigida venosa oblonga vel lanceo-oblonga 10–19 cm. longa 4–8 cm. lata paullo infra medium latiore, margine integerrima subrevoluta, basi obtusa vel rotunda, apice acuta vel plus minusve attenuata, subtus (juventate conspicue et maturitate sparse) villulosa imam ad basim glandulis 2 notata, supra sublucida evidenter rugosa nervis et costa subtus prominentibus, supra conspicue impressis; petiolo 1–2 cm. longo usque 2 mm. crasso subglabro; racemis e nodis defoliatis erumpentibus solitariis; rhachi 5–8 cm. longa recta puberulenta medium versus ca. 0.5 mm. crassa; pedicellis 3–5 mm. longis decurvatis puberulentis; hypanthio hemisphaerico 2–3 mm. alto 2.5–4 mm. diametro marginem superiorem versus saepe plus minusve constricto extus puberulento intus infra medium sparse villuloso; petalis albis late ovatis 2–3 mm. longis 2–3-seriatis intus basim versus sparse villulosis; lobis calycis 1.3 mm. longis triangularibus; staminibus 30–40; antheris oblongis ca. 1.5 mm. longis; filamentis ca. 1.5 mm. longis glabris; ovario sparse villuloso; fructu ignoto.

GUATEMALA: Chichavac, dept. Chimaltenango, 2400–2700 m. alt., medium-sized tree in deep valley, about 18 m. tall with trunk 4 dm. thick at breast height, flowers white, July 29, 1933, A. F. Skutch 504 (TYPE, Arn. Arb.).

A species evidently related to *P. Skutchii*, described above, from which it differs in having firmer more elongate conspicuously veined leaves which are hairy beneath, grayish mature branchlets with small non-tumid transverse slit-like lenticels, short pedicels, and a rounded hemispheric hypanthium which is frequently constricted about its summit. From *P. Cortapico* Koehne, of western Mexico, it differs in its sparser indument, presence of leaf-glands, puberulent racemes, multiseriate petals, etc.

**Dussia grandifrons**, sp. nov.

Arbor usque 30 m. alta, coma lata sparse ramosa, cortice trunci laevi griseo; foliis grandibus minute inconspicueque brunneo-pubescentibus, juventate conspicue denseque fulvo-tomentosis; rhachi 7–10 dm. longa subterete medium versus 4–6 mm. crassa; foliolis alternis 19–25 chartaceis 3–6 cm. distantibus supra viridibus sublucidis glaberrimis

subtus pallidioribus inconspicue pubescentibus apice breviter acuminatis, costa pallida conspicua, nervis primariis utrinque 20–25 rectis ascendentibus subparallelis 7–12 mm. distantibus cum nervis secondariis parallelis conjunctis pallidis prominulis, petiolulis 5–10 mm. longis 2–3 mm. crassis; foliolis supremis (3) supra medium latioribus deinde basim versus gradatim attenuatis 15–25 cm. longis 6–11 cm. latis basi acutis; foliolis infimis (4–6) abrupte minoribus ovatis vel ellipticis 6–13 cm. longis 3–8 cm. latis basi obtusis apice acutis vel acuminatis; foliolis intermediis (11–16) oblongis 6–8 cm. latis 15–25 cm. longis marginibus subparallelis basi abrupte contractis et truncatis vel subcordatis; panicula subterminali conspicue fulvo-tomentosa, ramis 10–15 saepissime simplicibus racemiformibus 25–50 cm. longis ascendentibus angulatis medium versus 2–3 mm. crassis, racemis ca. 50-floris 4–5 cm. crassis, bracteis conspicuis 7–10 mm. longis lanceolatis longe acuminatis 3–4 mm. latis late affixis; bracteolis basi calycis adpressis ca. 5 mm. longis 2–3 mm. latis obovatis tridentatis apice acuminatis; calyce ca. 0.8 mm. longo dense tomentello, basi solido valde obliquo costato in pedicellum 4–7 mm. longum plus minusve lateralem abrupte contracto; tubo cupulari infra dentes superiores leviter umbonato; lobis 2–4 mm. longis inaequalibus triangularibus, duobus superioribus supra medium confluentibus; petalis extus dense pallideque pubescentibus; vexillo persistente libero suborbiculato 15–17 mm. diametro rosaceo apice rotundo basi in unguem 4–5 mm. longum 1–1.5 mm. latum abrupte contracto; lamina alarum oblonga 10–12 mm. longa 4–5 mm. lata apice obtusa basi in unguem 3–4 mm. longum abruptissime contracta; lamina petalorum carinae 11–13 mm. longa 5 mm. lata oblonga basi obliqua apice obtusa, ungue 4–5 mm. longo; staminibus 10 glaberrimis basim versus connatis, anteriore imam ad basim biglanduloso a ceteris libero; antheris oblongis ca. 0.7 mm. longis; ovario dense adpresque brunneo-villoso elongato 2–3-plo longiore quam lato breviter crasseque stipitato; stylo gracillimo basim versus plus minusve villoso alibi glaberrimo apice curvato (vix uncinato); stigmate minuto inconspicuo glabro; fructu ignoto.

GUATEMALA: Colombia, dept. Quezaltenango, 870 m. alt., in coffee-plantation with the original forest-shade, a tree 30 m. tall, crown open and spreading, bark smooth and gray, flowers pale pink with green streak down center of standard, Dec. 28, 1934, A. F. Skutch 2027 (TYPE, Arn. Arb.).

A very distinct species of *Dussia* characterized by its very large, not distinctly bicolored leaves, broadly lanceolate long acuminate bracts, and obovate toothed bracteoles. According to Dr. Skutch the tree was nearly leafless at anthesis. The leaves collected were obtained from a basal branch which bore no flowers.

**Brongniartia Abbottiae, sp. nov.**

Frutex usque 1 m. alta ramosissima; ramulis gracilibus 0.5–1 mm. crassis pilis ca. 0.4 mm. longis mollibus haud appressis saepe brunneis (rariter plus minusve albidis) abundantibus vestitis vel subvelutinis, internodiis 5–15 mm. longis; stipulis ellipticis 5–6 mm. longis ca. 2.5 mm. latis oblique affixis foliolis subsimilibus; foliis numerosis; rhachi gracillima 3–4.5 mm. longa sparse pilosa; foliolis ellipticis 4–10 mm. (saepe 7–9 mm.) longis 2–6 mm. latis oppositis (5–)7-jugis ca. 1 mm. longe gracilimeque petiolulatis, supra sparsissime appresseque pilosis, subtus (costa excepta) glabris, margine plus minusve revolutis sparse ciliolatis, basi rotundis, apice rotundis et mucronulatis; floribus axillaribus rosaceis (in sicco albidis); pedicellis (stipite calycis inclusu) gracilibus 3–5 mm. longis ebracteolatis; calyce sparse setoso; tubo calycis cupulato ca. 2 mm. crasso et profundo basi obconico piloso in stipitem ca. 1 mm. longum contracto; lobis anterioribus lanceolatis vel anguste triangularibus 2.5–4 mm. longis, duobus posterioribus confluentibus apice 0.5–1 mm. profunde bidentatis; lamina vexilli reflexa 8–9 mm. lata ca. 7 mm. longa rotunda apice emarginata basi in unguem ca. 2 mm. longum abrupte contracta; lamina alarum ca. 5 mm. longa 2 mm. lata ca. 2 mm. longe unguiculata; lamina petalorum carinae ad 4 mm. alta 6 mm. longa apice obtusa basi 2 mm. longe unguiculata; leguminibus submaturis compressis oblongis glabris ca. 15 mm. longis et 10 mm. latis supra basim ca. 3 mm. longe perobliqueque stipitatis; seminibus 2–3.

MEXICO: Taxco, Guerrero, low spreading bush about a meter tall, flowers brick-salmon, June 14, 1937, Ruth Q. Abbott 211 (TYPE, Gray Herb.); Taxco, Aug. 12, 1937, Abbott 351 (G).

A very distinct species for which I can find no close relative. The type collection is one of the many specimens collected in the region about Taxco by Mrs. Gordon Abbott. It is a pleasure to associate her name with such a well marked species of the region she is botanizing so thoroughly.

**Acalypha Skutchii, sp. nov.**

Arbor 6 m. alta trichotome ramosa; ramulis viridibus elongatis plus minusve sulcatis minute antrorseque strigulosis; foliis alternatis; petiolis gracilibus ascendentibus minute strigulosis, foliorum superiorum saepissime minus quam 2 cm. longis, foliorum inferiorum elongatis usque ad 12 cm. longis; lamina lanceolata vel elliptico-lanceolata 10–20 cm. longa 2.5–8 cm. lata, quam petiolus subduplo usque decemplo longiore medium versus vel paullo supra medium latiore apicem versus attenuata deinde longe acuminata basi acuta vel obtusa margine crenato-serrata undique sparse strigulosa tandem glabrescente minutissime abundantissi-

meque punctulata; nervis primariis pinnatis 8–10-jugis ascendentibus pallidis cum nervulis secondariis transversis conjunctis; stipulis sub-persistentibus 10–18 mm. longis 2–4 mm. latis acuminatis; spicis unisexualibus; femineis terminalibus rigidis erectis 1–2 dm. longis (pedunculo 1–4 cm. longo inclusu); floribus 1–10 mm. distantibus sessilibus; bracteis strigulosis late affixis ad anthesim 1–2 mm. longis maturitate 3–5 mm. longis medium versus digitate 7–11-lobatis tantum basi fructus vaginatis; stylis 3 perconspicuis rubris 0–10 mm. longis divergentibus paullo supra basim confluentibus laceratis, lobulis flagellatis 2–3 mm. longis; ovario pallide abundanterque strigosis maturitate sparse strigosis ca. 6 mm. longis; capsulis et seminibus ignotis; spicis masculis axillaribus flavis 8–10 cm. longis.

GUATEMALA: Volcan Zunil, dept. Quezaltenango, 1650 and 1620 m. alt., tree beside stream, Aug. 8 and 31, 1934, A. F. Skutch 981 (TYPE, Arn. Arb.) and 917 (AA). MEXICO: Finca Mexiquito, Chiapas, July 1913, Purpus 6951 (G).

A species belonging to the section DENTATAE, as defined by Pax in Engler, Pflanzenr. (Heft 85) IV, 147<sup>xvii</sup>, p. 44 (1924), and apparently most closely related to *A. Ferdinandi* K. Hoffm. of Central America. The present plant, however, differs from its probable relative in its coarser stems, more elongate petioles, thinner leaf-blades not cordate at the very base, more abundantly flowered much denser pistillate spikes, and more deeply lobed bracts.

#### **Sarcococca guatemalensis, sp. nov.**

Frutex 15–25 dm. altus, glaberrimus, flavo-viridis, monoicus; ramulis lutescentibus costatis angulatis 2–4 mm. crassis rectis elongatis; foliis alternis 1–5 cm. distantibus; lamina lanceolata vel elliptica coriacea integerrima 5–10 cm. longa 15–45 mm. lata medium versus vel paullo infra medium latiori apice plus minusve acuminata basi acuta vel obtusa supra nitidula subtus opaca pallidiore manifeste medio-costata sed perinconspicue penninervata (nervis plus minusve 8–10-jugatis); petiolo 5–10 mm. longo saepe flavescente supra sulcato; floribus in glomerulas bracteatas 5–15-floras congestis, superioribus 1–2 femineis, ceteris numerosis masculis; glomerulus in axillis foliorum pedunculatis vel ad apicem ramuli subpaniculatis bisexualibus; pedunculus angulatis 2–10 mm. longis; bracteis 1–2 mm. longis carinatis triangularibus acuminatis margine ciliolatis; floribus masculis ebracteolatis 0.5–2 mm. longe angulateque crassi-pedicellatis; sepals 4, biseriatis, exterioribus herbaceis 3–3.5 mm. longis ca. 1.5 mm. latis late affixis medium versus latioribus deinde apicem versus attenuatis margine ciliolatis dorso convexis, interioribus longioribus et latioribus submembraneis 3.5–4 mm.

longis 2.8 mm. latis late ellipticis basi rotundis in acumen ca. 1 mm. longum abrupte terminatis extus glabris intus plus minusve villosulis margine ciliolatis; staminibus 4 oppositisepalis; filamentis albis latis glaberrimis 3–5 mm. longis imam ad basim anguste connatis; antheris oblongis 1–2.5 mm. longis ca. 1 mm. latis paullo supra basim ad connectivum latum dorsaliter affixis; rudimento ovarii depresse tetragono ca. 0.5 mm. alto 0.8 mm. diametro; floribus femineis in medio glomeruli terminalis solitariis vel geminatis; pedicellis 1–5 mm. longis bracteolatis; bracteolis pluribus decussatis imbricatis triangularibus breviter acuminatis ca. 2 mm. longis ciliolatis; sepalis 4 bracteolis superioribus consimilibus; stylis 2 attenuatis ca. 2–2.4 mm. longis supra sulcatis; ovario 4-loculato; bacca alba.

GUATEMALA: Santa Elena, dept. Chimaltenango, 2700 m. alt., shrub 2.4 dm. tall in cypress-forest, flowers yellowish green, berries white, plant at anthesis, Feb. 26, 1933, A. F. Skutch 288 (TYPE, Arn. Arb.); Chichavac, dept. Chimaltenango, 2520 m. alt., open oak-woods, shrub 2.4 m. tall, filaments white, perianth green, Aug. 18, 1933, Skutch 553 (AA); Soloma, dept. Huehuetenango, 2910 m. alt., second-growth wood, shrub 1.5 m. tall, flower white, Skutch 992 (AA).

The genus *Sarcococca*, of the Buxaceae has been known only from southeastern Asia and in Malaysia and has been unreported from America. The present species of Guatemala has a gross aspect very similar to the species of the Old World and particularly to the Indian *S. Hookeriana* Baill. and to the Chinese *S. ruscifolia* Stapf. From all of these, however, it is quickly distinguished by having the female flowers borne among the male flowers and terminal in the inflorescence, rather than below the male flowers and lateral as prevails in the Asiatic and Malaysian species. This difference is an important one in the closely related genus *Buxus*, a genus which differs from *Sarcococca* in the capsular rather than berry-like fruit.

### *Ilex quercetorum*, sp. nov.

Arbor 15 m. alta; ramulis elongatis rectis, junioribus 1.5–2.5 mm. crassis fuscis puberulentis sulcatis angulatis, vetustioribus subgriseis subteretibus; foliis 1–3 cm. distantibus; stipulis minutis ca. 0.5 mm. longis anguste triangularibus; petiolo 3–5 mm. longo vix alato supra canaliculato quam lamina 12–14-plo breviore puberulento; lamina lanceolata 18–22 mm. lata 5–8 cm. longa medium versus vel paullo infra medium latiore utrinque attenuata coriacea laete viridi ad costam puberulenta ceterum glabra, apice acuminata, basi acuta, margine integerrima leviter revoluta; costa supra conspicue impressa canaliculata subtus prominente; nervis primariis inconspicuis; pedicellis fructiferis

axillaribus solitariis fuscis puberulentis 8–13 mm. longis angulatis; pedunculis vix evolutis; calyce fructus explanato 4 mm. diametro, lobis 4 latissimis brevibus apiculatis ciliolatis; bacca rubra globosa 8–10 mm. diametro stigmate prominulo 4-lobato ca. 1.3 mm. diametro coronata; nuculis 4 dorso bisulcatis ca. 5 mm. longis et 3 mm. crassis.

GUATEMALA: Nebaj, dept. Quiché, 1860 m. alt., oak-forest, Nov. 15, 1934, A. F. Skutch 1663 (TYPE, Arn. Arb.).

This species is a member of the section CASSINOIDES Loes. The pedicel of the fruit is devoid of bractlets and is not articulated. The peduncle, hence, is absent and the flowers borne singly directly in the leaf-axils. Dr. Skutch states that the plant becomes a tree 15 m. tall and has a trunk 25 cm. thick at breast height. A number of trunks may arise together from the ground and form a large clump. The berries are bright red.

### *Ilex ampla*, sp. nov.

Arbor 22 m. alta, glaberrima, coma ampla; ramulis rectis subteretibus nigrescentibus longitudinaliter striatis 3–5 mm. crassis; foliis magnis persistentibus; petiolo 12–15 mm. longo quam lamina 12–15-plo breviore recto in siccō ruguloso; stipulis deltoideis 2.5 mm. longis 2 mm. latis tarde deciduis; lamina oblonga vel ovato-oblonga saepe 16–18 cm. longa 6–9.5 cm. lata rigida coriacea apice obtusa (? vel subacuminata) basi rotunda vel subcordulata margine remote et haud conspicue crenata supra subnitida subtus opaca sub lente minutissime punctulata; costa supra insculpta subtus prominente; nervis primariis ca. 12–15-jugis prominulis imam ad basim sub angulo ca. 80° a costa divergentibus supra basim arcuate ascendentibus tantum juxta marginem anastomosantibus; nervis secondariis paucis; inflorescentia axillari solitaria racemiformi vix pedunculata cylindrica fructifera 3 cm. longa 12–15 mm. crassa 20–30-flora; rhachi ascende 1–1.5 mm. crassa rigida; bracteis deltoideis ca. 1 mm. longis; pedicellis fructiferis ascendentibus rigidis 2–3 mm. longis solitariis vel ternatis in apice axis secondarii ca. 3 mm. longi bracteati; calyce fructifero explanato ad 2 mm. diametro, lobis 4 rotundis 1 mm. latis 0.5 mm. longis; corolla ignota; fructu 4–5 mm. longo 3–4 mm. crasso globoso-ellipsoideo atro-rubro baccato stigmate prominulo coronato, exocarpio tunicato hyalino; nuculis 4 angulatis 3 mm. longis ad 1.5 mm. latis dorso convexis longitudinaliter costatis 1-seminatis.

GUATEMALA: Colomá, dept. Quezaltenango, 900 m. alt., tree 22 m. tall with widely spreading crown, fruit dark red, Sept. 26, 1934, A. F. Skutch 1320 (TYPE, Arn. Arb.).

This is a member of the section THYRSIFLORAE Loes., previously

known only from tropical South America. It is readily distinguished by its short cylindrical racemiform inflorescences as well as by its detached northern occurrence. The type is a specimen with ripe fruit. The corolla and male structures of the species are, accordingly, unknown.

***Ilex gracilipes*, sp. nov.**

Frutex 2.5–3.5 m. altus; ramulis rectis ascendentibus vel patentibus, junioribus 1–1.8 mm. crassis sulcatis subangulatis sub lente plus minusve minute pubescentibus vel subglabris, vetustioribus cortice griseo sulcato-rugoso obtectis; foliis 3–10 mm. distantibus; stipulis ca. 1 mm. longis triangulari-subulatis; petiolo quam lamina 6–10-plo breviore 3–6 mm. longo minute pubescente vel subglabro 0.5–1 mm. late alato supra canaliculato; lamina lanceolato-ovata vel lanceolata 1.3–2.4 mm. lata 3–5 cm. longa subcoriacea, apice acuta vel breviter acuminatis, basi obtusa vel acuta, margine obscurissime undulata integra vel apicem versus sparsissime dentata revoluta, supra viridi lucente imam ad basim et ad costam minute puberulenta ceterum glabra vel ubique glabra, subtus pallida glaberrima sub lente abundanter minutissimeque punctulata; nervis primariis 7–12-jugis sub angulo 45°–90° a costa patentibus subrectis juxta marginem laminae arcuatis et anastomosantibus subtus prominentibus supra impressis vel inconspicuis; nervis secondariis paucis; pedunculis fructiferis axillaribus solitariis puberulentis vel glabris unifloris vel rariter bifloris 3–10 mm. longis gracilibus rectis angulatis apice bracteas pedicelliferas minutis ca. 0.8 mm. longas gerentibus; pedicellis 5–10 mm. longis; calycibus fructiferis 4-meris patelliformibus, sepalis latissime erosionis ca. 0.5 mm. longis et 1 mm. latis; corolla alba 5 mm. diametro ca. 2 mm. longa; petalis late ovatis; tubo ca. 0.5 mm. longo; bacca immatura subglobosa ca. 4 mm. diametro glaberrima 6-loculata stigmate hemispherico prominulato coronata.

GUATEMALA: Soloma, dept. Huehuetenango, 2220 m. alt., shrub 2.4–3.6 dm. tall, flowers white, fruit immature, Aug. 21, 1934, A. F. Skutch 1060 (TYPE, Arn. Arb.).

A member of the section CASSINOIDES of Loesener, Monog. p. 131 (1901), and a relative of the Mexican species, from which it may be distinguished by its moderately firm leaves, slender elongate mostly solitary and uniflorous inflorescences, and 6-celled berry. The type-collection represents the female plant and shows the flowers and nearly mature berries. The leaves and flowers are borne only on the new wood. The species belongs, probably, closest to *I. coriacea* (Pursh) Chapm.

***Sloanea ampla*, sp. nov.**

Arbor grandis ca. 40 m. alta; ramulis apicem versus 8–10 mm. crassis angulatis cinnamomeo-velutinis; petiolo velutino 4–13 cm. longo 3–5

mm. crasso recto terete; lamina folii grandi 2–3-plo longiore quam lata 35–55 cm. longa 12–20 cm. lata supra medium latiore, margine obscure grosseque sinuata, supra glaberrima viridi opaca, subtus (costa et nervis exceptis) glabra sublucida brunneo-viridi, apice obtusa, basi obtusa vel truncata; costa subtus pubescente brunnea prominente imam ad basim geniculata; nervis primariis prominentibus parallelis ca. 17-jugis, secondariis et tertiiis prominulis glabris; stipulis asymmetricis herbaceis 2.5–4 cm. longis 13–20 mm. latis supra basim latioribus anguste triangularibus vel triangulari-lanceolatis basi oblique lateque truncatis margine integris vel rariter paudentatis apice graciliter attenuatis; floribus ignotis; capsula ipsa globosa 4–6 cm. diametro, appendiculis teretibus 1 mm. crassis 2–5 cm. longis abundantissimis rigidis brunneis minutissime adpressostrigulosis echinata, maturitate in segmenta lignoso-coriacea 4 vel 5 loculicide dehiscente; segmentis 8–12 mm. crassis 2.5–3 cm. latis vetustis subexplanatis intus cortice conspicue colorato rubro obtectis; pedicello fructifero 3–7 cm. longo 3–5 mm. crasso; calyce fructifero ca. 2 cm. diametro explanato, lobis ca. 10 inaequalibus triangularibus vel cuneatis plus minusve recurvatis; seminibus in loculis solitariis ellipsoideis leviter compressis ca. 25 mm. longis 12–17 mm. crassis arillo aurantiaco carnoso totum involutis.

GUATEMALA: Volcan Zuníl, dept. Quezaltenango, 1680 m. alt., Aug. 7, 1934, A. F. Skutch 968 (TYPE, Arn. Arb.); Finca Moca, dept. Suchitepequez, 1050 m. alt., in forest, Jan. 10, 1935, Skutch 2108, fruit only.

The collector notes that this is a large tree which reaches forty meters in height. The trunk at breast height becomes 15–18 dm. thick. Its base is very irregularly and deeply ridged and furrowed, forming small plank-butresses. The tree is "called Zulín in Quiché." The type from Volcan Zuníl consists of foliage and immature fruits. At Finca Moca Dr. Skutch collected mature fruit and alcoholic specimens of the mature seeds. Concerning the fruit he notes that it splits into four or five segments and reveals its red interior as it hangs apex downward from the tree. The seeds remain attached near the apex of the segments. The orange aril which entirely covers the seed is nibbled off by birds while they are still attached to the pod. The species is well marked by its very large leaves, unusually large stipules, and very large heavy bur-like fruit. This latter, including the abundant elongate slender appendages, becomes 8–10 cm. in diameter.

#### **Oreomyrrhis daucifolia, sp. nov.**

Herba 1–3 dm. alta, e radice subnapiformi 5–7 mm. crassa oriens, basi ramosa; ramis 5–8 subsimplicibus 1–2-foliatis 2–3 mm. crassis ascendentibus; internodiis elongatis usque ad 15 mm. longis; foliis flaccidis

tripinnatis, in planta juvenili omnibus subrosulatis, in planta florifera omnibus caulinaribus; rhachi minute retrorseque pubescente ca. 1 mm. crassa supra medium foliolata saepe 10–20 cm. longa; vagina 1.5–3 mm. longa subglabra basi 3–4 mm. lata; pinnulis primariis 5–10-jugis 6–20 mm. longis 3–10 mm. latis vix petiolulatis subtus sparsissime retrorseque pubescentibus; pinnulis secondariis 5–7-jugis 2–6 mm. longis 1–3 mm. latis; pinnulis ultimis pinnatisectis, lobulis ascendentibus 1–4 (saepe 2–3)-jugis linearibus vel anguste lanceolatis uninervatis 1–3 mm. longis 0.2–0.3 mm. latis apice attenuatis setuliferis, sinubus apertis; pedunculis valde elongatis 0.8–1.6 mm. crassis 8–20 cm. longis quam folia valde longioribus ramis 1–2-foliatis terminatis subscapiformibus apicem versus dense hirtellis basim versus subglabris; umbellis simplicibus 10–20-floris; involucro palmate trilobato 6–7 mm. longo, lobis pinnatisectis pinnulis secondariis illis folii similibus; pedicellis inaequalibus 1–5 mm. longis rectis; petalis "albis plus minusve purpureo-tinctis"; fructu 4–5 mm. longo 1–1.3 mm. lato infra medium latiore sub maturitate glabro purpureo; mericarpiis subpentagonalibus ca. 0.8 mm. crassis; valliculis saepe 3-vittatis.

GUATEMALA: Charcol, Sierra Cuchumatanes, dept. Huehuetenango, 3180 m. alt., alpine meadow, Sept. 15, 1934, A. F. Skutch 1263 (TYPE, Gray Herb.).

This plant is one of that variable assemblage of montane plants, ranging from central Mexico to Fuegia and from New Zealand to Formosa, which most past authors have called *Oreomyrrhis andicola* (HBK) Endl. In recent years there has been a tendency to break up this aggregate. In fact a study of any large series does show that it consists of over a dozen segregate species which have ranges relatively local and of a pattern similar to that found in the associated species of other genera. True *O. andicola* is a plant of the cordilleras of northwestern South America. A closely related but evidently separable species is found on the peak of Orizaba in southern Mexico. This plant, *M. orizabae*, is evidently separable from *M. tolucana*, of the peaks of Toluca and Ixtaccihuatl further north in Mexico. These most northern relatives of *O. andicola* may be described and contrasted with the unusually distinct plant of Guatemala which I have described above.

***Oreomyrrhis orizabae*, sp. nov.**

Herba pusilla imam ad basim ramosa; caulis usque ad 5 (rariter 10) mm. longis saepissime subnullis; foliis flaccida bipinnatis; lamina griseo-viridi puberulenta; rhachi 3–4 mm. longa; lobis ultimis lanceolatis 1–2 mm. longis 0.3–0.9 mm. latis integris vel rariter 1–2-lobatis; sinubus saepe clausis; pedunculis scapiformibus 2–5 cm. longis; lobis involuci

2-3-lobatis reflexis; pedicellis 2-5 mm. longis; mericarpiis 2.5-3 mm. longis.

MEXICO: Orizaba, 3600-3700 m. alt., *Pringle* 8546 (TYPE, Gray Herb.) and *Rose & Hay* 5744 (G).

**Oreomyrrhis tolucana**, sp. nov.

Herba pusilla basim versus ramosa; caulis usque ad 10 mm. longis saepissime subnullis; foliis subcarnosulis bipinnatis; lamina viridi; rhachi 2-3 cm. longa; lobis ultimis ellipticis vel late lanceolatis 1-2 mm. longis 0.5-1 mm. latis integerrimis; sinibus clausis; pedunculis 1-4 cm. longis scapiformibus; lobulis involuci oblongis vel ellipticis integris; pedicellis 1-3 mm. longis; fructu 2-3 mm. longo.

MEXICO: Toluca, 4050 m. alt., *Pringle* 4236 (TYPE, Gray Herb.) and *Rose & Painter* 7978 (G); Ixtaccihuatl, *Purpus* 1679 (G).

**Buddleia hypsophila**, sp. nov.

Arbuscula; ramulis subangulatis laxe ramosis internodiis 1-6 cm. longis juventate griseis vel subaurantiacis dense minuteque stellato-pubescentibus; foliis oppositis; petiolis 0.5-2 cm. longis ca. 1.5 mm. crassis angulatis supra caniculatis quam lamina 5-8-plo brevioribus; lamina late lanceolata coriacea 5-10 cm. longa 12-30 mm. lata infra medium latiore, margine integerrima, apice acuta, basi abrupte rotundata vel obtusa, supra viridi sparsissime stellato-pubescente mox glabrescente opaca, subtus ochroleuca abundantissime minuteque stellata densissime tomentulosa; costa conspicua; nervis primariis supra conspicue impressis subtus prominentibus 9-15-jugis rectis tantum juxta marginem furcatis et anastomosantibus; nervis secondariis inconspicuiis vel subnullis; inflorescentia pyramidali terminali aphylla vel ramis inferioribus duobus e axillis foliorum 2-3 cm. longorum orientibus; ramulis oppositis ca. 4-paribus 1-3 cm. distantibus ascendentibus capitulis solitariis vel geminatis sessilibus vel usque 1 cm. longe pedunculatis terminatis, infimis 2-3 cm. longis, supremis 5-10 mm. longis; capitulis 10-15 mm. diametro 25-50-floris; calyce dense minute stellato-pubescente cupulato 2-3 mm. longo, lobis triangularibus 1-1.5 mm. longis; corolla "aurantiaca" in sicco cinnabrina 6 mm. longa extus supra medium dense minuteque pubescente intus in tubo et ad basim loborum sparse pilosa; lobis corollae 4 ca. 2 mm. longis et latis apice rotundis; limbo ca. 6 mm. diametro; tubo basi ca. 2 mm. diametro apice 3.5-4 mm. diametro; antheris 0.8-1 mm. longis; filamentis ca. 0.5 mm. longis ad apicem tubi affixis; ovario dense stellato-tomentuloso; fructu ignoto.

GUATEMALA: Volcan Santa María, dept. Quezaltenango, 3600 m. alt., July 27, 1934, small tree, flowers orange, *A. F. Skutch* 843 (TYPE, Arn. Arb.).

A very attractive plant related to *B. megalcephala* Donn. Sm. but differing in having slightly smaller heads in a more compounded inflorescence, a denser paler indument, and much smaller leaves. The leaves are abruptly contracted at the base and merely acute at the apex, rather than long attenuate.

**Cobaea Skutchii, sp. nov.**

Gracillima; caulis ca. 1 mm. crassis nodos versus inconspicue pubescentibus alibi glabris in sicco subangulatis; foliis pinnatis; rhachi gracillima 4-foliolata imam ad basim jugum foliorum reflexorum caulem amplectens et 3–4 cm. supra basim alterum jugum gerente apice in cirrhum gracillimum plus minusve ramosum producta; foliolis tenuiter membranaceis glaberrimis lanceolatis 7–10 cm. longis 25–35 mm. latis medium versus latioribus apice acuminatis basi abrupte (1–1.5 cm. late) truncatis vel subcordatis in petiolulos 1–2 cm. longos graciles abrupte contractis; floribus axillaribus solitariis ca. 20 cm. longe recteque pedunculatis; sepalis late ovatis imbricatis ca. 13 mm. longis 8–11 mm. latis infra medium latioribus apice attenuatis imam ad basim connatis, fructiferis ca. 16 mm. longis conspicue medio-costatis margine subcrispis; corolla viridi ca. 25 mm. longa quam calyx subdupo longiore extus supra medium inconspicue pubescente intus glaberrima; lobis corollae 6–7 mm. longis et latis apice rotundis erectis; staminibus ca. 6 mm. supra basim corollae affixis; filamentis 3 cm. longis conspicue (1 cm. longe) exsertis basim versus (5–7 mm. supra basim) conspicue villosa-ciliatis; antheris 7 mm. longis; stylo gracillimo 4 cm. longo glabro; capsula 4 mm. longa ca. 15 mm. crassa.

GUATEMALA: Palmar, dept. Quezaltenango, herbaceous vine climbing over thickets by stream, fl. green, 1221 m. alt., Oct. 14, 1934, A. F. Skutch 1456 (TYPE, Gray Herb.).

A very well marked species because of its small greenish corollas, long exserted stamens, and very slender herbaceous stems.

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